

EXHIBIT

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ATIS STANDARD

ATIS-0406000-23

EXCHANGE MESSAGE INTERFACE (EMI)

Industry Support Interface

Issue 23

ATIS-0406000-2300
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Exchange Message Interface (EMI)

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1.0 General Description

This document provides data pertaining to the Exchange Message Interface (EMI). The EMI is a guideline used for the exchange of telecommunications message information between Sending and Billing Companies. Data is provided between companies via multiple unique record layouts that contain message data, customer billing information, account summary information and tracking analysis.

1.1 Field Information

Data fields are depicted within each record layout. Each field is displayed with its appropriate position within each record. Definitions and data characteristics are defined for each field in a separate section.

The proper default for a numeric field is zeros. The proper default for an alphanumeric field is blanks unless noted otherwise in the field description.

1.2 Purpose

The EMI provides a unique but common method for exchange of telecommunications message information between Sending and Billing Companies for billing and tracking analysis.

1.3 Magnetic Tape

See Section 6

1.4 Shading Requirements

Shaded fields are not required and therefore, not applicable to the record. The field should be populated with the correct default value. The only edit performed on this field is a numeric check (if the field is defined as numeric). Use of this field to pass "local information" is discouraged. On returned records, this field may contain the default value regardless of how the sending company populated it.

Unshaded fields are required and therefore will contain information based on the field definition. Under certain circumstances, it may be appropriate to populate this field with the default value indicating "no information." For example, if state and/or local taxes do not apply to a message, the "State Tax" and/or "Local Tax" fields will contain zeros.

ATIS-0406000-2300
July 2009

CARRIER ACCESS USAGE
NORTH AMERICAN ORIGINATED AND TERMINATED
MESSAGE TELEPHONE SERVICE

11 Category				01 Group				01 Record Type																					
Pos	Field Description			Char.	Pos	Field Description			Char.	Pos	Field Description			Char.															
1	Category				68	Method Of Recording			9	135	Reserved for Local Company Use (continued)			9															
2	Group				69	Return Code			X	136	Reserved			9															
3	Record Type			X	70	From RAO			X	137	NECA Company Code			X															
4	Year				71	Local Company Information		Cust. Bill Format	9	138	BSA / Feature Group D Call Event Status			9															
5	Month			9	72	Conference Leg Number		9	139	Reserved			9																
6	Day				73	Type of Access Service			9	140	BSA / Feature Group ID Code			X															
7	From Number Length			9	74	Reserved			9	141	Library Code			X															
8	NPA			9	75	Method Of Signaling			9	142	Settlement Code			X															
9	NXX				76	Indicators			9	143	Conversation Time			9															
10	Line Number				77				82	Operator Unit					9														
11	Overflow Digits				78				83						Recording Point Identification (AMA)			9											
12	To Number Length				79				84									Serial Number			9								
13	NPA				80				85												CABS Billing RAO			X					
14	NXX				81				86															Indicators			9		
15	Line Number			82	87				NPA																		9		
16	To Number			83	88	BSA / Feature Group A Access Number							9																
17	Originating / Terminating ID			84	89							Reserved for Local Company Use																9	
18	BSA / Feature Group D Trunk Group Number			85	90										Reserved for Local Company Use														9
19	MTA Indicator			86	91													Reserved for Local Company Use											
20	Carrier Identification Code			87	92																Reserved for Local Company Use								
21	Carrier Access Method			88	93																			Reserved for Local Company Use					
22	Routing Method			89	94				Reserved for Local Company Use																		9		
23	Dialing Method			90	95	Reserved for Local Company Use																							
24	ANI			91	96							Reserved for Local Company Use																9	
25	NCTA			92	97										Reserved for Local Company Use														9
26	Hr			93	98													Reserved for Local Company Use											
27	Min			94	99																Reserved for Local Company Use								
28	Sec			95	100																			Reserved for Local Company Use					
29	Min			96	101				Reserved for Local Company Use																		9		
30	Min			97	102	Reserved for Local Company Use																							
31	Sec			98	103							Reserved for Local Company Use																9	
32	Sec			99	104										Reserved for Local Company Use														9
33	1/10			100	105													Reserved for Local Company Use											
34				101	106																Reserved for Local Company Use								
35				102	107																			Reserved for Local Company Use					
36				103	108				Reserved for Local Company Use																		9		
37				104	109	Reserved for Local Company Use																							
38				105	110							Reserved for Local Company Use																9	
39				106	111										Reserved for Local Company Use														9
40				107	112													Reserved for Local Company Use											
41				108	113																Reserved for Local Company Use								
42				109	114																			Reserved for Local Company Use					
43				110	115				Reserved for Local Company Use																		9		
44				111	116	Reserved for Local Company Use																							
45				112	117							Reserved for Local Company Use																9	
46				113	118										Reserved for Local Company Use														9
47				114	119													Reserved for Local Company Use											
48				115	120																Reserved for Local Company Use								
49				116	121																			Reserved for Local Company Use					
50				117	122				Reserved for Local Company Use																		9		
51				118	123	Reserved for Local Company Use																							
52				119	124							Reserved for Local Company Use																9	
53				120	125										Reserved for Local Company Use														9
54				121	126													Reserved for Local Company Use											
55				122	127																Reserved for Local Company Use								
56				123	128																			Reserved for Local Company Use					
57				124	129				Reserved for Local Company Use																		9		
58				125	130	Reserved for Local Company Use																							
59				126	131							Reserved for Local Company Use																9	
60				127	132										Reserved for Local Company Use														9
61				128	133													Reserved for Local Company Use											
62				129	134																Reserved for Local Company Use								
63				130																				Reserved for Local Company Use					
64				131					Reserved for Local Company Use																		9		
65				132		Reserved for Local Company Use																							
66				133								Reserved for Local Company Use																9	
67				134											Reserved for Local Company Use														9

Field Characteristic
9 = Numeric ↓ = Continued on Next Column
X = Alphanumeric ↑ = Continued on Next Column
S9 = Signed Numeric

ATIS-0406000-2300
July 2009

RECORD DESCRIPTION

<u>11</u>	<u>01</u>	<u>01</u>
Category	Group	Record Type
Category:	11	CARRIER ACCESS USAGE
Group:	01	NORTH AMERICAN ORIGINATED AND TERMINATED
Record Type:	01	MESSAGE TELEPHONE SERVICE

Use of Record:

This record is used to report Access Minutes of use for Message Telephone Service.
This record may also be used for interconnection (e.g. unbundled, local, wireless, etc.) services.

Headers/Trailers

	<u>CMDS</u>	<u>Local</u>
20-20-09/10	Y	Y
20-21-09/10	N	Y
20-22-31/32	N	Y
20-24-09/10	N	Y

Special Considerations:

When Indicator 4 = 7 and Originating/Terminating ID = 1, the ULEC's OCN should be populated in the Originating OCN field (positions 167-170).

When Indicator 4 = 7 and Originating/Terminating ID = 2, the ULEC's OCN should be populated in the Terminating OCN field (positions 182-185).

For originating calls, the Originating OCN field in positions 167-170 should be populated with the OCN of the company that originated the call when the From Number, positions 15-24, is ported and the Originating LRN, positions 157-166 is populated.

For terminating LEC carried calls, the Originating OCN field in positions 167-170 should be populated with the OCN of the company that originated the call. Carrier Identification Code may or may not be populated.

For terminating IC-Carried calls, the Originating OCN should not be populated even when Originating LRN is populated.

To identify Cellular/Wireless originating and terminating traffic, the Type of Access Service (position 78-79) and Indicator 9 or 10 (position 90 & 91) should be populated.

The matrix below lists what fields are shaded on the 11-01-01 based on Feature Group. A value of "X" in a given column means that the field is shaded for that Feature Group.

Field Name	Position	FGA	FGB	FGC	FGD
Overflow Digits	25-27	X	X	X	X
BSA/FGD Trunk Group No.	41-44	X	X	X	
Carrier Identification Code	46-49	X			
Carrier Access Method	50	X		X	
Routing Method	51	X			
Dialing Method	52	X	X	X	X
ANI	53	X		X	
NCTA	54	X	X	X	X
Customer Bill Format	75	X	X	X	X
Conference Leg Number	76-77	X	X	X	X
Method of Signaling	81	X		X	
NPA-BSA/FGA Access No.	123-125		X	X	X
NXX-BSA/FGA Access No.	126-128		X	X	X
Line No./BSA FGA Access No.	129-132		X	X	X
NECA Company Code	138-141	X			
BSA/FGD Call Event Status	142-143	X	X	X	
Settlement Code	149	X	X		
Min-Conversation Time	150-153	X	X	X	
Sec-Conversation Time	154-155	X	X	X	
1/10-Conversation Time	156	X	X	X	

ATIS-0406000-2300

July 2009

SECTION 4

FIELD DESCRIPTIONS

ATIS-0406000-2300

July 2009

Return Code 12

A two-position alphanumeric field describing the reason for returning an unbillable message code. The population of this field should be locally negotiated.

Return Code 13

A two-position alphanumeric field describing the reason for returning an unbillable message code. The population of this field should be locally negotiated.

Return Code 14

A two-position alphanumeric field describing the reason for returning an unbillable message code. The population of this field should be locally negotiated.

Returned Messages Revenue

A seven-position numeric field, in the format \$\$\$\$\$\$, on BCC/Independent EC Trailer records. This field contains the total of the revenues associated with the messages defined in the field description of NUMBER OF RETURNED MESSAGES. The revenues for these messages should not be included in the count of other subtotaled fields in the record, to enable the result of the addition of the subtotaled fields to be equal to the GRAND TOTAL REVENUE count.

Revenue Type Indicator

A one-position numeric field used to designate the type of revenue. Values are as follows:

- 1 = Invoice Billing
- 2 = Casual User
- 3 = Both

Route Index Queries

A nine-position numeric field that is used in the 500 SCP Usage Service Provider record that contains number of table look ups to determine Trunk Group.

Routing Method

A one-position numeric field that defines whether a FG-B, FG-C or FG-D call was direct or tandem routed. This field should always be populated on originating and terminating records. The values are:

- 0 = Direct routing
- 1 = Tandem routing

Run Number

A three-position numeric field used by an IC to provide a unique number to identify a transmission on the header record of Invoice Summary Packs.